

Background

n 1986, Congress established the Defense Environmental Restoration Program (DERP) in Section 211 of the Superfund Amendments and Reauthorization Act (SARA). Section 211 of SARA was codified in Title 10 of the U.S. Code (USC), Section 2701. The program goals of the Formerly Used Defense Sites (FUDS) and the DERP are:

- Identify, investigate and clean up hazardous contaminants.
- Correct the environmental damage (such as detection and disposal of unexploded ordnance)

• Demolish and remove unsafe buildings

and structures.

Under DERP are three program categories, the Installation Restoration (IR) Program, the **Military Munitions** Response Program (MMRP), and the Building Demolition/Debris Removal Program. Work under the **FUDS Program is** performed under each of these three program categories. **Authority for** executing the FUDS Program has been



Pieces of old ordnance

delegated to the U.S. Army Corps of Engineers by DoD through Headquarters, Department of the Army. The estimated MMRP work at FUDS will comprise a much larger cost than the remaining work under the other two program categories. However, because of program goals established by DoD, the FUDS program is currently focused on completing IR projects and the current annual funding for FUDS MMRP work is about one third of the total FUDS annual budget.

Design Center

Huntsville Center is a Design Center for MMRP (for both conventional and chemical

warfare materiel ordnance) and in this role, plans, manages and executes many of the MMRP projects for FUDS and BRAC projects. Huntsville Center also supports range maintenance projects and clearance of munitions and explosives of concern (MEC) and munitions constituents (MC) at active ranges to support construction.

To execute its FUDS program, a team of engineers and other specialists study eligible sites throughout the country to determine if MEC or MC contamination exists. In cooperation with local Corps of Engineers' districts, public officials, regulatory agencies, interested citizens and other stakeholders, Huntsville Center leads the phases to identify MEC/MC, determine its potential danger, develop a plan to remove the MEC/MC or reduce its risk and oversee the



A FUDS project in Spring Valley, Washington, D.C.

execution of that plan. The local geographic district serves as the overall project manager for the investigation and response actions, and handles the real estate and public involvement responsibilities.

Headquarters, U.S. Army Corps of Engineers in Washington, D.C., oversees the FUDS program and provides approval and funding. Huntsville Center's goal at MMRP sites is to reduce in a timely, cost-effective manner, the risk to human health, safety and the environment of hazards which have resulted from past DoD activities. The Center applies rigid safety standards and uses contractor personnel highly qualified in MEC/MC removal. Center personnel who oversee safety have specialized military training and extensive specialized experience in MEC removal.



Photo by Tommy Dile

A technicial examines an underground storage tank at a FUDS site in Kinross, Mich.

The Response Process

The Corps executes MMRP response actions in the following described phases:

- *Preliminary Assessment (PA)*. This is the initial phase performed for FUDS to determine property and project eligibility. This stage includes review of historical records, development of Archives Search Reports (ASR), site visits and development of an Inventory Project Report, which recommends further action, if required.
- Site Inspection (SI). During this phase, the historical use of the site is reviewed. Limited investigation of the site is performed which may include samples for both MEC and munitions constituents. These records include maps, drawings, aerial photographs and visual inspection of the site. The results of this phase are documented in a site inspection report. If the SI report confirms a MEC/MC problem, the Corps proceeds to the next phase of the process.
- Remedial Investigation/Feasibility
 Study (RI/FS). The purpose of the RI/FS is to identify the most appropriate response action to address a MEC or MC risk at a project site.
 Integral parts of the RI/FS include a complete site characterization in which the area, depth and density of MEC/MC contamination is estimated; a risk assessment of hazards present at the site; and an evaluation of potential response alternatives. The selected alternative is documented in a decision document.
- Remedial Design/Remedial Action. A statement of work, work plan and explosives safety plan for the selected alternative comprise the major elements of a removal design. Once these documents are approved, the contractor begins work to perform the remedial action.

The phases described above are followed during the remedial process. If an imminent hazard is discovered during any phase, a removal action may be initiated to address the immediate hazard.